## INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/04819

A. CLASSIFICATION OF SUBJECT MATTER  IPC(7) :G06F 17/60 US CL :705/41						
According to International Patent Classification (IPC) or to both national classification and IPC						
B. FIELDS SEARCHED						
Minimum documentation searched (classification system followed by classification symbols)						
U.S. : 705/41, 35, 39, 43, 44						
Documentat	ion searched other than minimum documentation to the	extent that such documents are included	in the fields searched			
Microsoft Press, Microsoft Press Computer Dictionary 3rd edition.  Considine, Van Nostrand 's Scientific Encyclopedia 6th edition.						
Electronic d	ata base consulted during the international search (na	me of data base and, where practicable,	search terms used)			
Please See Extra Sheet.						
C. DOCUMENTS CONSIDERED TO BE RELEVANT						
Category*	Citation of document, with indication, where app	propriate, of the relevant passages	Relevant to claim No.			
Y	US 5,748,737 A (DAGGAR) 05 MAY invention, col.4 lines 28-35, col.19 lin		1-84			
Y	US 5,721,781 A (DEO ET AL.) 24 FE background, and the summary of the inv 12-14, col.1 lines 17-30, col.9 lines 2 claims 1, 3.	1-84				
Y,P	US 5,907,142 A (KELSEY) 25 May 1 35-62, col.9 lines 3-34.	1-84				
Y	US 5,875,394 A (DALY ET AL.) 23 FEBRUARY 1999, the summary of the invention, Fig. 3, col.3 line 30 to col.4 line 10.					
X Furth	er documents are listed in the continuation of Box C	. See patent family annex.				
* Sp	ecial categories of cited documents:	"T" later document published after the int date and not in conflict with the app				
	cument defining the general state of the art which is not considered be of particular relevance	the principle or theory underlying the				
	lier document published on or after the international filing date	"X" document of particular relevance; the considered novel or cannot be considered.				
	cument which may throw doubts on priority claim(s) or which is ed to establish the publication date of another citation or other	when the document is taken alone				
"O" doe	countries of an oral disclosure, use, exhibition or other ans	"Y" document of particular relevance; the considered to involve an inventive combined with one or more other such being obvious to a person skilled in	step when the document is h documents, such combination			
	cument published prior to the international filing date but later than priority date claimed	"&" document member of the same patent family				
	actual completion of the international search	Date of mailing of the international sea	Date of mailing of the international search report			
10 JUNE 2000		23 AUG 2000				
	nailing address of the ISA/US	Authorized officer				
Box PCT	ner of Patents and Trademarks	CUONG H. NGUYEN	ا ب ، ما			
Facsimile N	n, D.C. 20231 o. (703) 305-3230	Telephone No. (703) 305-4553	egenia zogo			

## INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/04819

C (Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.
Y,P	US 6,006,328 A (DRAKE) 21 DECEMBER 1999, see the abstract, and the summary of the invention.		1-84
A,P	US 5,901,228 A (CRAWFORD) 04 MAY 1999, the enti	ire patent.	1-84
A	US 5,815,657 A (WILLIAMS ET AL.) 29 SEPTEMBER entire patent.	15,657 A (WILLIAMS ET AL.) 29 SEPTEMBER 1998, the atent.	
A,P	US 5,963,924 A (WILLIAMS ET AL.) 05 OCTOBER 1999, the summary of the invention.		1-84
A,P	US 6,016,484 A (WILLIAMS ET AL.) 18 JANUARY 2 background and the summary of the invention.	2000, the	1-84

## INTERNATIONAL SEARCH REPORT

International application No. PCT/US00/04819

		FC1/0300/04819		
	B. FIELDS SEARCHED Electronic data bases consulted (Name of data base and where practicable terms used):			
	WEST1.2/DERWENT, DIALOGUE CLASSIC, NPL (CORPORATE RESOURCE NET) search terms: register\$3 same user\$1, public with key\$1, identif\$ same key\$1, encrypt\$3 or decrypt\$3, approv\$3 with request\$1, write same authenticat\$3, transact\$3 and (authenticat\$3 same authoriz\$5 same emulat\$), ((memory or stor\$) same write) and smart, interac\$3 same imitat\$3, (card with terminal) same interfac\$3 same emulat\$3, scal\$3 or vendor\$1, (on-line or on-line) with transact\$, opinion\$ or review\$1 or rating\$1, attribute\$1 or match\$3, crit\$ or specification\$1, www or web or intermet.			
		·		
١				